v_i

Amendments to the Specification:

Please amend the paragraph beginning on page 10, at line 28 as shown below:

When the engine is running with the control command EGR ON, engine operation is defined as the EGR mode. IMT is measured and is called IMT_measured. IMP is measured and is called IMP_measured. IMT_measured and IMP_measured are used to calculate IMT-critical (dew-point temperature of the gases in intake manifold) using an equation discussed earlier to define the critical temperature as a function of selected influences as shown at 124. If IMT_measured is not greater than or equal to IMT_critical, then EGR is shut OFF as shown at 128. Now the engine is operating in Boost mode (no EGR).

Please amend the paragraph beginning on page 11, at line 17 as shown below:

To predict the possibility of condensation at a new operating point after the exhaust gas recirculation has been turned off and the engine is operating in boost mode, the controller 26 will predict the possibility of condensation while staying in boost mode and determine if re-entry is possible without undesirable condensation[[. By]] by reliance upon information in the tables as discussed below. In the preferred embodiment, the tables have been determined empirically, although other sources for the differentials may be included without departing from the present. Nevertheless, the tables will be calibrated at a given ambient condition.

Please amend the paragraph beginning on page 14, at line 1 as shown below:

When the engine is operating in boost mode, the intake manifold temperature in EGR is predicted by having intake manifold temperature measured in boost mode added to the differential taken from table 1 at the load and speed nearest operating conditions. This produces intake manifold temperate temperature predicted. Similarly, the intake manifold pressure in the exhaust gas recirculation mode is predicted by detecting the intake manifold

Atty Dkt No. DDC 0544 PUS

S/N: 10/627,520

,}

Reply to Office Action of October 27, 2004

pressure in boost mode measured and adjusted by the differential of the intake manifold pressure between boost mode and EGR mode from table 2 at the selected speed and load range values.